

Choroidal Thickness Changes After Intravitreal Anti-VEGF Therapy for Age-Related Macular Degeneration: Ranibizumab Versus Aflibercept

Magda Gharbiya

+ Author Affiliations & Notes

Investigative Ophthalmology & Visual Science June 2015, Vol.56, 1507. doi:<https://doi.org/>

Abstract

Purpose: To compare the changes in subfoveal choroidal thickness in eyes with neovascular age-related macular degeneration (nAMD) treated with intravitreal ranibizumab or aflibercept.

Methods: In this retrospective study, the medical records of 28 patients with nAMD treated with at least 3 consecutive monthly injections of ranibizumab (0.5 mg/0.05 mL) or aflibercept (2mg /0.05 mL) between December 2013 and June 2014 and who were followed up for at least 3 months were reviewed. Subfoveal choroidal thickness was measured using enhanced-depth-imaging optical coherence tomography

Results: Choroidal thickness decreased over time in the aflibercept group, but remained virtually unchanged throughout the study in the ranibizumab group. At each time point, the decrease was significantly greater in the aflibercept treated eyes compared to the ranibizumab treated eyes ($P < 0.05$). No significant change in best-corrected visual acuity (BCVA) occurred in either group during follow-up. There was no correlation between change in choroidal thickness and age, sex, duration of previous anti-vascular endothelial growth factor treatment, number of previous injections, spherical equivalent, baseline choroidal thickness, and baseline BCVA.

Conclusions: Subfoveal choroidal thickness appeared to decrease significantly in eyes with nAMD during 3 months of aflibercept treatment. No corresponding decrease in choroidal thickness occurred in ranibizumab-treated eyes.

The Association for Research in Vision and Ophthalmology